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The evolution of the Fleet Hospital Program: from the Cold War era to the Naval Expeditionary Medical Support System

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THESIS

**THE EVOLUTION OF THE FLEET HOSPITAL
PROGRAM: FROM THE COLD WAR ERA TO THE
NAVAL EXPEDITIONARY MEDICAL SUPPORT SYSTEM**

by

Joseph Triplett, Jr.

December, 1997

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WAR ERA TO THE NAVAL EXPEDITIONARY MEDICAL SUPPORT SYSTEM**

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Lieutenant, United States Navy
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Submitted in partial fulfillment of the
requirements for the degree of

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ABSTRACT

The global security environment has changed significantly since the original concept of fleet hospitals was developed. This thesis examines the process used to plan and budget for fleet hospitals, and examines the events that shaped the configuration and billet structure of fleet hospitals. Evidence for this thesis was taken from reports from DOD, GAO and Congress, congressional testimony, studies conducted by the Center for Naval Analyses, journal articles, after action reports and pertinent DOD directives and manuals. Additional data were obtained through interviews with key officials involved in resourcing and managing the Fleet Hospital Program and training personnel assigned to augment fleet hospital platforms. The thesis concludes that planning and budgeting for fleet hospitals is dependent on the structure of the THCSRR model. The establishment of Single Sourcing Hospitals to deploy as fleet hospital units is intended to enhance fleet hospital operational performance by capitalizing on working relations developed delivering the peace time benefit. As the Cold War ended and more accurate methods for estimating casualty rates emerged, the requirement for fleet hospitals decreased from 17 to 10. Shifts in Navy and Marine Corps doctrine to lighter, faster and more flexible maneuvers have led to the development of NEMSS.

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LIST OF ACRONYMS

AMD	Authorized Manpower Document
ASD (HA)	Assistant Secretary of Defense (Health Affairs)
ASD (RA)	Assistant Secretary of Defense (Reserve Affairs)
BUMED	Bureau of Medicine and Surgery
CBTZ	Combat Zone
CINC	Commander in Chief
CJCS	Chairman, Joint Chiefs of Staff
CNA	Center for Naval Analysis
CNO	Chief of Naval Operations
CO	Commanding Officer
CONUS	Continental United States
COMMZ	Communications Zone
CORC	Care of Returning Casualties
DOD	Department of Defense
DPG	Defense Planning Guidance
DS/DS	Desert Shield/Desert Storm
FH	Fleet Hospital
FH5	Fleet Hospital FIVE
FHOTC	Fleet Hospital Operations and Training Command
FHSO	Fleet Hospital Support Office
FMF	Fleet Marine Force
FY	Fiscal Year
FYDP	Future years Defense Plan
HSO	Healthcare Support Office
ISO	International Standardization Organization
JHSS	Joint Health Service Support
JOPEs	Joint Operations Planning and Execution System
JMREC	Joint Medical Readiness Education Council
MAP	Medical Augmentation Program
MAT	Medical Analysis Tool
MHS	Military Health System
MOOTW	Military Operations Other Than War
MOSR	Medical Operational Support Requirement
MOSR _A	Medical Operational Support Requirement, Active
MPM	Medical Planning Module (of JOPEs)
MT	Measurement Ton
MTF	Medical Treatment Facility
NAVSUP	Naval Supply System Command
NEC	Navy Enlisted Classification
NEMSS	Naval Expeditionary Medical Support System
NMSD	National Military Strategy Document
NOBC	Navy Officer Billet Code
OMFTS	Operational Maneuver From the Sea
OPLAN	Operations Plan
PCS	Permanent Change of Station
PDM	Program Decision Memorandum
PML	Program Manager, Logistics
POM	Program Objective Memorandum
PPBS	Planning, Programming and Budgeting System

RAP	Readiness Alignment Plan
RLC	Responsible Line Commander
SECNAV	Secretary of the Navy
SLEP	Service Life Extension Program
SORTS	Status of Resources and Training System
THCSRR	Total Healthcare Support Readiness Requirement
THCSRR _A	Total Healthcare Support Readiness Requirement, Active
XO	Executive Officer

I. INTRODUCTION

A. BACKGROUND

The mission of the Bureau of Medicine and Surgery (BUMED) is to provide prompt and effective health care to combat forces in time of conflict and to deliver cost-effective health care in peacetime. Fleet hospitals have played an important role in support of BUMED's mission and in furthering the strategic interest of the United States. They have been called upon to deploy in support of military operations such as Desert Shield/Storm, and to humanitarian missions like Bosnia, Zagreb and Haiti. Fleet hospitals have provided immediate medical care in support of combat operations ashore and afloat.

The Fleet Hospital Program was established in 1979, with the first procurement funded in fiscal year 1983. Initially, 23 fleet hospitals were approved in the medical Program Objective Memorandum(POM). However, only 17 of the approved fleet hospitals were actually procured. Figure 1-1 is a breakdown of the initial type and unit cost of fleet hospitals approved during the 1982 POM process.

As a result of the end of the Cold War, the Department of Defense (DOD) has been forced to redefine its role and mission. The New World Order has resulted in increased

Number Approved	Size	Type	Unit Cost
3	250	CBTZ	\$18 Million
10	500	CBTZ	\$23.5 Million
5	500	COMMZ	\$28 Million
5	1000	COMMZ	Varied

Figure 1-1 Cold War Fleet Hospital Configuration

Source: PML-500

international emergencies which require the use of medical assets. Prior to deployment during the Gulf War, fleet hospitals were not used in military or humanitarian operations. Since that time fleet hospitals have been used frequently to support operations other than war. However, two critical factors affect Navy Medicine's ability to respond to these emergencies: DOD's restructuring through downsizing, and changes in the Navy and Marine Corps focus from a global threat on the high seas to a focus on littoral areas, as reflected in Operational Maneuver From the Sea and subsequently, Forward...from the Sea. As the Department of Defense and Marine Corps restructure and redefine their role and mission, Navy Medicine must ensure that fleet hospitals provide appropriate support to accomplish the mission.

1. Fleet Hospital Mission

The primary mission of the Fleet Hospital Program is to provide comprehensive medical support to the fleet and Fleet Marine Force (FMF) engaged in combat operations. However,

the mission of a fleet hospital depends on its type and the operation which it is supporting. The type of hospital use is determined by the echelon of care in which the hospital will operate. Figure 1-2 describes the echelons of care and the available resources.

ECHELONS	LEVEL OF CARE	RESOURCES
I	First Aid Emergency Care	Self/Buddy Aid Aid Station HSS Personnel
II	Initial Resuscitative	Shock Trauma Platoon Surgical Company Shipboard Surgical & Holding Capability
III	Resuscitative	T-AH CBTZ Fleet Hospital
IV	Definitive	COMMZ Fleet Hospital OCONUS MTF/DTF
V	Convalescent Restorative Rehabilitative	CONUS MTF/DTF Veterans Administration NDMS

Figure 1-2 Echelons of Care

Source: NWP 4-02.4

a. 100-Bed Fleet Hospital

The mission of the most recently established and smallest fleet hospital, the 100-bed, provides a full range of resuscitation and emergency wound stabilization surgery for acute wounded and ill patients. This type of facility was developed to provide medical support to low intensity conflict peacetime operations. The concept of the 100-bed hospital was introduced around 1992.

b. 250-Bed Combat Zone (CBTZ) Fleet Hospital

The 250-bed CBTZ hospital provides full resuscitation and stabilization surgery to wounded and ill patients in the rear of the CBTZ. The goal of this type of hospital is to maximize the return to duty of personnel who do not require medical evacuation further rearward.

c. 500-Bed Combat Zone (CBTZ) Fleet Hospital

The 500-bed CBZT fleet hospital provides the same support as the 250-bed CBZT hospital.

d. 500-Bed Communications Zone (COMMZ) Fleet Hospital

The 500-bed COMMZ fleet hospital provides more definitive, restorative medical and surgical care to personnel evacuated from the CBTZ.

The larger fleet hospitals (250-bed and 500-bed) were established to provide medical care in support of the Cold War mission. Since the end of the Cold War, large scale casualties are considered to be unlikely and the focus has shifted to supporting low intensity conflicts. The 100-bed fleet hospital was developed to support the current focus [Ref. 1].

2. Number of Fleet Hospitals

There are 10 fleet hospitals funded, equipped and pre-positioned throughout the world. Six of the hospitals are identified to be staffed by Active duty personnel, with the

remaining four hospitals staffed by Reserve personnel [Ref. 2]. Figure 1-3 is a breakdown of the type and unit cost of the post Cold War fleet hospital configuration.

Number Approved	Size	Type	Unit Cost
10	500	Generic Core	\$33.5 Million

Figure 1-3 Post Cold War Fleet Hospital Configuration

Source: PML-500

This thesis will examine the current structure of planning and budgeting for fleet hospitals, provide a comprehensive overview of the factors that affect the Fleet Hospital Program, and assess the progress of Navy Medicine's plan to provide fleet hospital support in the post Cold War environment.

B. OBJECTIVE OF THE RESEARCH

This research will provide an overview of the process used to resource the current fleet hospital structure. This thesis will also show how Navy Medicine has adapted the fleet hospital program to changing support requirements. The research will be beneficial to anyone interested in understanding the fleet hospital concept.

C. RESEARCH QUESTIONS

This thesis will attempt to answer the following questions:

- What is the current structure for planning and budgeting for fleet hospitals?
- What is the current fleet hospital structure, including both Active and Reserve forces?
- Which organizations within Navy Medicine are responsible for resourcing and managing the Fleet Hospital Program?
- How many fleet hospitals are required and how is this requirement generated?
- What doctrine developments guide the deployment of fleet hospitals?
- How did changes that occurred as a result of the Post Cold War environment effect fleet hospitals?

D. SCOPE OF THE THESIS

This thesis examines the current planning, doctrine, and manpower requirements concerning the establishment of and budget requirement for fleet hospitals. The thesis discusses what has brought a change in the structure of the fleet hospital program, the status of the implementation of policy changes, and the effects on the budget.

E. METHODOLOGY

Data was obtained through a literature review of current periodicals, General Accounting Office and other government reports and through personal interviews. I conducted telephone interviews with key personnel at Fleet Hospital Support Office, Bureau of Medicine and Surgery, Fleet Hospital Operations and Training Command, Naval Supply

Systems Command, and Chief of Naval Operations, Medical Resources, Plans and Policy Division.

F. ORGANIZATION OF THESIS

Chapter I of this thesis provides an introduction to the topic, and describes the role and mission of fleet hospitals. The remaining chapters will address the primary research question as well as the secondary research questions.

Chapter II of this thesis provides background information on the budgeting process for fleet hospitals. The number of fleet hospitals required as well as how the requirement is generated and executed will also be identified and discussed.

Chapter III discusses the unique training requirements for personnel assigned to fleet hospital platforms. Provides and overview of the impact of breakup of the Soviet Union and the post Cold War environment on the mission of the Department of Defense and subsequently, the role of fleet hospitals. The 733 study, THCSRR model, and Readiness Realignment plan are also discussed. Additionally, organizational responsibilities for oversight of training requirements and doctrine development are discussed.

Chapter IV discusses Navy Medicine's plans and policies to support the shift in Marine Corps doctrine to more flexible operational maneuvers Forward... from the Sea.

Finally, Chapter V contains the summary and conclusions of the thesis.

II. BUDGETING

A. PLANNING, PROGRAMMING AND BUDGETING SYSTEM (PPBS)

In 1963, under the direction of the Secretary of Defense, Robert McNamara, the planning and programming cycles were introduced into the budgeting process. The PPBS system was designed to assist the Secretary of Defense in making decisions concerning the allocation of resources among competing programs and alternatives to accomplish the objectives of the United States national defense. The planning and budgeting phases of PPBS are linked together by the programming phase, which formalizes the process of allocating scarce resources among costly programs and weapons systems. PPBS, which involves three phases, planning, programming, and budgeting, drives the Department of Defense's annual budget process [Ref. 3].

1. Planning

Planning is the first phase of the PPBS process. During the planning phase, the global threat is assessed and a strategy to meet the threat is defined. The President determines the National Security Strategy after receiving input from a variety of sources. Using the President's National Security Strategy, the Chairman of the Joint Chiefs of Staff develops the National Military Strategy Document (NMSD). The NMSD provides advice to the President, National

Security Council and the Secretary of Defense on the recommended national security strategy and the force structure required to accomplish the national security strategy objective. The final and most important document produced in the planning phase is the Defense Planning Guidance (DPG). The DPG incorporates both the President's National Security Strategy and the NMSD, then provides force and fiscal guidance to the services, which allows them to develop their Program Objective Memorandum (POM) and annual budget.

2. Programming

Programming translates the strategy plans into programs defined in term of forces, personnel, material, and dollars. The POM is produced by developing a six-year plan for allocating financial resources. The Medical Department's POM is prepared by BUMED and submitted to OSD(HA) for incorporation into the Defense Health Program POM. Additionally, a DOD database, the Future Years Defense Program (FYDP), is developed and updated using POM decisions. The final document of the programming phase of PPBS is the Program Decision Memorandum (PDM). The Secretary of Defense issues PDMs, which approve or make adjustments to programs in POMs.

3. Budgeting

Budgeting expresses the financial requirements needed

to support approved programs. Budgeting is the translation of the planning and programming into annual fiscal requirements. The budgeting phase is completed when the President submits his budget to Congress [Ref. 3].

B. ESTABLISHING FLEET HOSPITAL REQUIREMENT

The modified Defense Planning Guidance of 1994 requires DOD to be ready to engage in two nearly simultaneous major regional conflicts and prepare for smaller scale operations other than war [Ref. 4]. Using the information in the DPG, the Joint Operations Planning and Execution System Medical Planning Module (JOPES MPM) is used to forecast the wartime medical requirement. The computations generated by the Medical Planning Module (MPM) are limited to forecasting echelons 3, 4, and 5 wartime requirements. The MPM is linked to the major operations plans' Time Phased Force Deployment Data, which provides data on the U.S. force population at risk, physician and nurse specialty care requirements, computes bed requirements, blood, evacuee, and other logistic requirements [Ref. 5].

As discussed in Chapter I, the 1979 MPM results established the requirement for 23 fleet hospitals, but only 17 were procured. The configurations of the procured fleet hospitals were three 250-bed CBZT, twelve 500-bed CBZT, and two 500-bed COMMZ fleet hospitals. Weaknesses in the ability of the MPM model to accurately represent reality

prompted DOD to consider developing a new model. As a result of changes in the world environment, political pressure, the changing role and size of military forces, and the post Cold War era, DOD was required to develop a new, more accurate model to replace the MPM. The model that was developed and that is currently being used for casualty estimating is the Medical Analysis Tool (MAT) [Ref. 6].

The results of recent MAT calculations established the requirement for ten generic 500-bed fleet hospitals. The core hospitals can be converted to support either CBZT or COMMZ operations with the augmentation of specialized packages. The locations of the ten prepositioned fleet hospitals are contained in Figure 2-1.

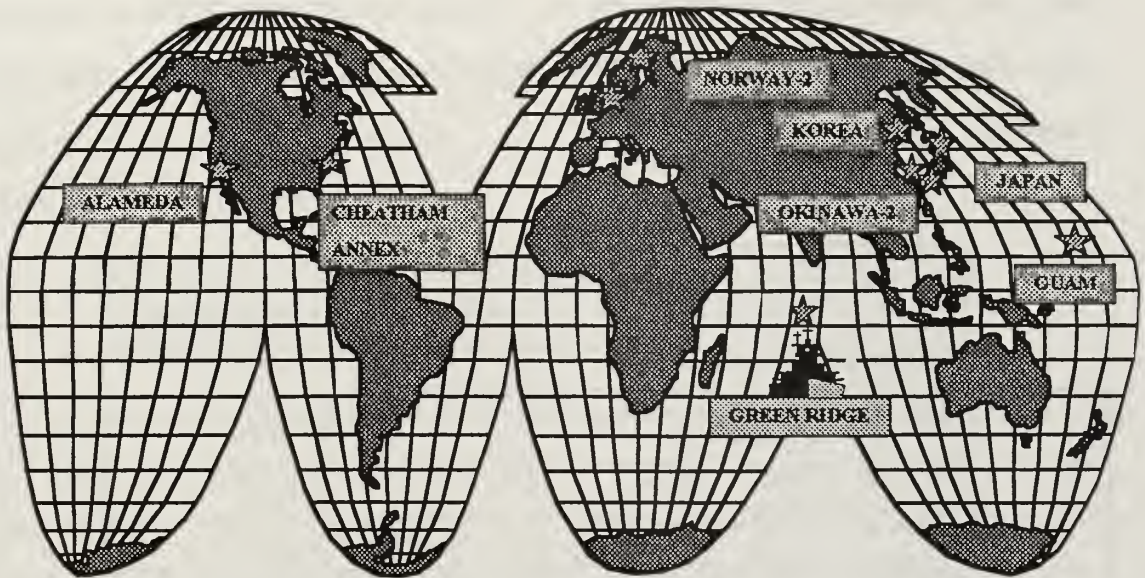
Once the requirement for material and personnel has been established, plans must be developed to provide staffing and equipment for the fleet hospitals.

C. RESOURCING

1. Personnel

Resource sponsorship for the Fleet Hospital Program is the responsibility of the Director, Navy Medicine (OP-093). When a fleet hospital is activated, it is designated as being supported by Active Duty or Reserve forces. Currently the 10 fleet hospitals have no permanent personnel assigned to staff the units. Figure 2-2 lists the initial personnel requirements for a 500-bed fleet hospital.

CURRENT LOCATION OF 500 BED FLEET HOSPITALS



Source: Fleet Hospital Program Office

Figure 2-1

The source and method for staffing Active Duty fleet hospitals are outlined in BUMEDINST 6440.5A, Medical Augmentation Program (MAP). MAP is a system that provides both officer and enlisted medical personnel to augment all types of operational units when required. Medical Treatment Facilities (MTF) located in the continental United States (CONUS) are assigned platforms to support (e.g., fleet hospitals, the FMF, etc.) [Ref. 7]. MTFs assess the skills of personnel assigned to their command, then distribute

appropriately skilled personnel to billets associated with the platform to be augmented.

Reserve fleet hospitals are staffed by designated reserve units [Ref. 1]. The source and method for staffing Reserve fleet hospitals are outlined in COMNAVSURFRESFORINST 5400.5B, Management of the Naval Reserve Fleet Hospital Program.

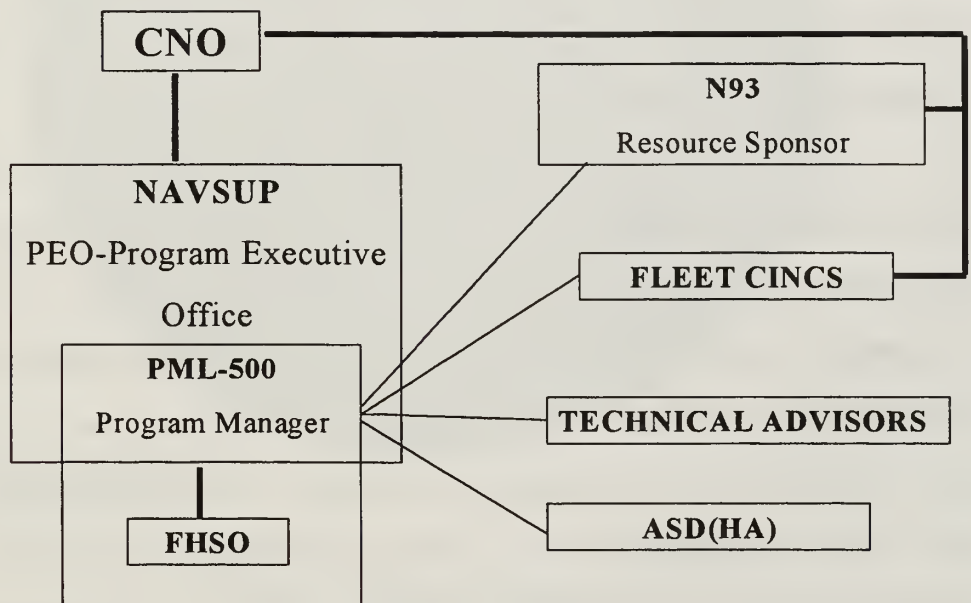
BILLET	NUMBER OF PERSONNEL
Medical Department Staff (2000)	2
Medical Corps (2100)	73
Nurse Corps (2900)	167
Dental Corps (2200)	7
Medical Services Corps (2300)	31
Non-Medical Dept. Officers	11
Hospital Corpsmen	543
Dental Technicians	16
Non-Medical Enlisted	281
TOTAL	1,131

Figure 2-2 500-Bed Fleet Hospital Staffing (initial)
Source: NWP 4-02.4

2. Equipment for Fleet Hospitals

Through the POM process, funds for the initial outfitting and replacement of equipment and supplies are procured. Equipment for the initial 17 fleet hospitals was

procured from fiscal year 1983 through 1989 [Ref. 8]. The Fleet Hospital Program office prepares and submits the POM to equip fleet hospitals. However, the Fleet Hospital POM is executed by Naval Supply Systems Command. All program manager responsibilities for the Fleet Hospital Program rest with the Commander, Naval Supply Systems Command as PML-500. Figure 2-3 is a diagram of the Fleet Hospital Program organizational chart.



Source: Fleet Hospital Program Office

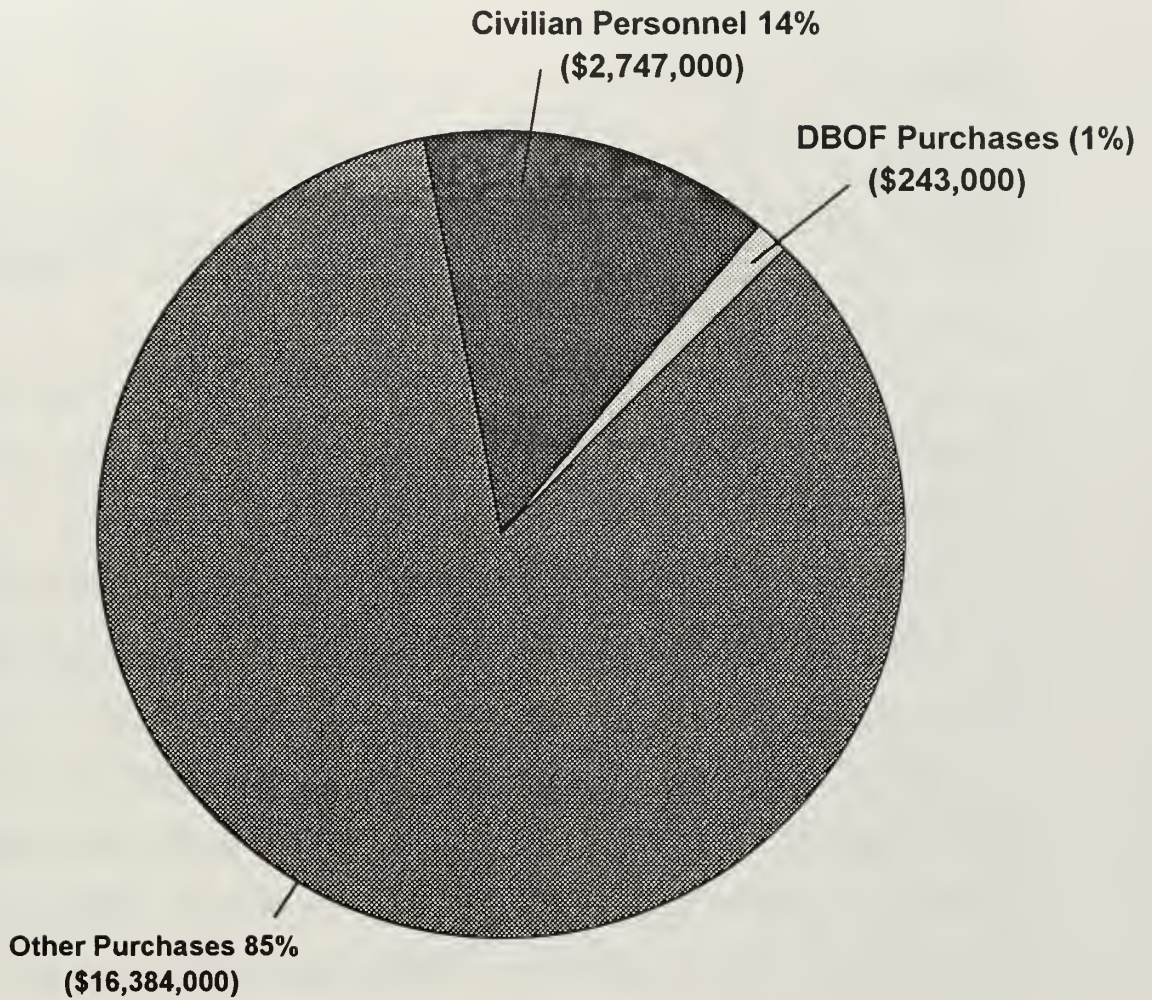
Figure 2-3

The Fleet Hospital Support Office (FHSO), located in Alameda, California, is responsible for managing the fleet

hospitals. The FHSO functions include design, procurement, storage, shipment and lifecycle management. Fleet hospitals are refurbished in Alameda every five years. Primarily during the summer months, several fleet hospitals are repositioned with newly rebuilt hospitals and the old hospitals are returned to Alameda for overhaul. During the rebuilding process, preventative maintenance is performed, stock inspected, shortages are filled and equipment upgrades are performed as required. A major portion of the Fleet Hospital Program's annual budget goes to maintaining the 10 fleet hospitals. Figure 2-4 is a breakdown of the Fleet Hospital Program fiscal year 1997 budget.

The information displayed in Figure 2-4 is taken from FY97 budget exhibit OP-32 for the Fleet Hospital Program. The OP-32 exhibit is a four-year summary of the costs of programs and anticipated changes in program costs [Ref. 3]. The Fleet Hospital Program Office prepares the OP-32 exhibit and submits it to Commander, Naval Supply Systems Command. The item identified as Other Purchases accounts for 85 percent of the program's budget. Figure 2-5 is a breakdown of the components of Other Purchases.

Fleet Hospital FY97 Budget



Total = \$19,374,000

Figure 2-4

Category	Amount	Percentage
Replacement Short Shelf Life	\$3,272,000	20
Fleet Hospital Support Office	\$2,944,000	18
Procurements	\$2,546,000	15
Updates and Shortages	\$2,338,000	14
Care of Supplies in Storage	\$2,181,000	13
Service Life Extension Program	\$1,636,000	10
Replacement Long Shelf Life	\$1,091,000	7
Defense Blood Support System	\$580,000	3

Figure 2-5: FY97 Fleet Hospital Budget for Other Purchases

Source: Fleet Hospital Program office

Currently, 79 percent of the funds used under the category identified as Other Purchases is directly related to maintaining the equipment and material readiness of fleet hospitals. The remaining 21 percent is used to operate the Fleet Hospital Support Office and the Defense Blood Support System.

The review of POM-99 for the Fleet Hospital Program resulted in a decision to maintain funding at approximately \$23 million dollars a year across the Future Years Defense Plan (FYDP) for the program. This funding level is thought to be sufficient to allow all 10 fleet hospitals to undergo the Service Life Extension Program (SLEP) process and be Naval Expeditionary Medical Support System (NEMSS) configured after completion of SLEP by 2002 [Ref. 20].

III. TRAINING

A. BACKGROUND

One of the most important missions that Navy Medicine performs is to provide and maintain readiness to provide medical support to operational forces during military operations. Put another way, the requirement to support two nearly simultaneous Major Theater Wars and Military Operations Other Than War (MOOTW) is the Medical Department's primary wartime readiness mission. Another part of the Medical Department's mission is to support the day-to-day operational health care requirement in support of deployed Department of the Navy units, and overseas and isolated medical and dental treatment facilities [Ref. 9]. In order to meet the needs to supply the required medical support to accomplish the medical wartime mission, Navy Medicine must provide the right people, with the right training and right equipment, in the right place at the right time [Ref. 9].

The method used to provide Medical Department personnel with the necessary skills to accomplish the wartime mission is through Medical Readiness Training. According to the Department of Defense, medical readiness consists of the following:

Medical Readiness encompasses the ability to mobilize, deploy and sustain field medical services and support for any operation requiring military services; to maintain and project the continuum of healthcare resources required to provide for the health of forces; and to operate in conjunction with beneficiary healthcare [Ref. 10].

This chapter will begin by discussing the type and methods used to accomplish fleet hospital readiness training during the Cold War era. Then a review of the effectiveness of the fleet hospital training program will be presented, focusing on deployments of Naval Reserve Fleet Hospital 15 and Fleet Hospitals 5 and 6 during Operation Desert Shield/Desert Storm. This is followed by an examination of the external environment, both political and structural, which prompted the Medical Department to change the way fleet hospital training is conducted. The chapter concludes with a review of the post Cold War process used to provide medical personnel with fleet hospital readiness training and a look at training oversight responsibilities.

B. FLEET HOSPITAL TRAINING, COLD WAR ERA

Operation Golden Shield marked the beginning of fleet hospital training at Camp Pendleton, California in 1986. The exercise began in January and concluded in July 1986. 300 Selective Reserves performing Active Duty for Training and approximately 200 Active Duty medical and non-medical personnel participated in the exercise. The objective of

the exercise was to, for the first time ever, assemble, document assembly of, and to partially evaluate the functionality of actual fleet hospital components. The components were one quarter of a 250-bed COMMZ fleet hospital [Ref. 11].

Training was broken down into five major phases:

- Phase One - Site preparation.
- Phase Two - Set up of fleet hospital and receive equipment.
- Phase Three - Advance party set up of the base and medical support area.
- Phase Four - Main body set up of the medical core.
- Phase Five - Main body conducts two-day casualty management exercise.

After the completion of Operation Golden Shield, Fleet Hospital Operations and Training Command (FHOTC) became the permanent training facility for training personnel assigned to staff fleet hospitals. The remote and austere nature of the FHOTC training site was considered representative of the environment that would be expected in a combat zone.

Based on the initial requirement for 23 fleet hospitals, plans were developed to train approximately 3,000 Active Duty and Reserve personnel annually. Approximately 20 classes per year were scheduled to train personnel in fleet hospital assembly, operation, and disassembly. The

objective was to train 40 percent the staff of each fleet hospital. The personnel that completed fleet hospital training were considered the fleet hospital cadre who served as the nucleus to support rapid assembly of the hospital in the combat zone [Ref. 11, 12].

The responsibility for assigning personnel to attend fleet hospital training was separated into two categories, Active Duty and Reserve components. For Active Duty personnel, the Geographical Commanders, and Commanders, Naval Medical Commands, were responsible for providing the appropriate the Navy Officer Billet Codes (NOBC) for officers and Navy Enlisted Classifications (NEC) for enlisted personnel for training. These Commanders tasked various hospitals, medical and dental commands within their authority to fill the appropriate training slots. This was necessary because personnel assignments to staff fleet hospital platforms were allocated among the numerous commands throughout the United States.

The Commander, Naval Reserve Forces was responsible for assigning Reserve personnel to attend fleet hospital training. Reserve fleet hospitals are organized as an entire unit and trained together. Frequently, most of the reserve training slots could be filled from the same Reserve fleet hospital [Ref. 11].

During the first two years of fleet hospital training,

1987 and 1988, both Active Duty and Reserve personnel attended fleet hospital training at FHOTC. In December of 1988 all the Active Duty classes were canceled due to manpower and funding constraints within the Navy Medical Command. The Naval Reserves accepted all the Active Duty classes for 1989. In 1990, 10 classes were conducted, 7 Reserve and 3 Active Duty. The remaining classes were canceled due to Operation Desert Shield/Desert Storm [Ref. 11].

C. FLEET HOSPITAL DIFFICULTIES DURING DESERT SHIELD/DESERT STORM

Medical personnel assigned to support echelon II and III units were deployed to Southwest Asia in two phases. Fleet hospitals are classified as echelon II units. The first phase of deployment began in August 1990 and involved over 4,200 Active Duty Navy personnel. Phase two began in December 1990 in preparation for the air war. Approximately 4,300 Navy medical personnel were deployed during phase two. The majority of the personnel deployed during phase two were reservists [Ref. 12].

The fleet hospitals were assembled and fully operational within the combat zone in the required two-week timeframe. However, the deployment of the fleet hospitals identified some areas in need of improvement.

Fleet hospitals are designed to provide combat related surgically intensive medical care. Shortages of equipment and supplies needed to support the day-to-day medical care needs of combatant units were experienced.

Decontamination stations were not a part of fleet hospital equipment packages.

There were very few fleet hospital personnel trained in patient decontamination procedures.

Many of the personnel were unaware of their wartime assignment.

A large number of personnel assigned to fleet hospitals reported in-theater without completing the required operational training.

Although the physicians and nurses who deployed were described as experienced and competent, many of them had never treated trauma patients...and a majority of them had not completed training in combat casualty care.

The lack of training was magnified for reserve corpsmen and nurses, many of whom held nonmedical civilian jobs and thus did not perform their medical duties during peacetime.

Personnel were unfamiliar with many pieces of the fleet hospital's equipment package. Most of the personnel assigned to fleet hospitals had not trained on the equipment prior to reporting [Ref. 12].

It was expected that at least 40 percent of the personnel mobilized to staff fleet hospitals during Operation Desert Shield/Desert Storm (DS/DS) would have the necessary training to assemble and operate the fleet hospitals. However, less than 20 percent of the Active Duty personnel deployed in support of DS/DS met this criterion. The personnel assigned to the Reserve fleet hospital did

achieve the goal of deploying at least 40 percent of their personnel with the necessary fleet hospital training [Ref. 12].

D. EXTERNAL ENVIRONMENTAL ISSUES

The collapse of the former Soviet Union in 1989 signaled the end of the Cold War era. Resource constraints and legislative pressures placed on DOD to downsize the force structure precipitated a review of the Military Health System (MHS) referred to as the 733 Study. Conducted by the Office of the Secretary of Defense, Office of Program Analysis and Evaluation, the 733 Study was an attempt to determine the total medical care requirement needed to support all three services during a post-Cold War scenario [Ref. 16]. The study concluded that programmed medical manpower and beds were significantly higher than needed. However, a follow-on to the 733 report may indicate that this discrepancy is not nearly as great as originally thought.

In response to the 733 study, Navy Medicine tasked the Center for Naval Analyses (CNA) to conduct a study to assess the manpower requirement to support Navy's day-to-day and operational mission. The CNA incorporated the 733 study into their study which, in turn, Navy Medicine used to develop a single model, the Total Healthcare Support Readiness Requirement (THCSRR) model [Ref. 17].

The Director, Medical Resources, Plans, and Policy Division (N931), referred to the THCSRR-MOSR model as "a living, breathing organism, it is our Navy mission through force structure. If you change our Navy mission or force structure, you change THCSRR." [Ref. 20]. Figure 3-1 illustrates how the THCSRR is built.

There are two components to the THCSRR: the Active Duty component, and the Reserve component. The Active Duty component starts with the results of the 733 study and in-theater workload support required to execute the Operation Plan (OPLAN). A union of the wartime manpower readiness requirements and the requirement to meet the day-to-day operational mission yields the Medical Operational Support Requirement (MOSR). The sustainment aspect of the force is added to the MOSR to derive the THCSRR [Refs. 17, 20].

The Reserve component also begin with the wartime workload requirements by the 733 study. The backfill mission of Reserve personnel in support of care for returning casualties is added to the wartime requirement, producing the THCSRR_R. Together, the THCSRR_A and the THCSRR_R produces the Total Force THCSRR.

The THCSRR model, along with changes in warfare doctrine, and a focus on readiness plays a major role in establishing future manpower requirements for Navy Medicine. The THCSRR model establishes Active duty and Reserve

Total Force THCSRR

Active Component

$$\begin{array}{ccccc} 733 & & & & \\ \text{Wartime}_A & & \text{U} & \text{Day-to-Day} & \\ & & & \text{Operational}_A & \\ & & & & = \text{MOSR}_A \end{array}$$

$$\text{MOSR}_A + \text{Sustainment} = \text{THCSRR}_A$$

Reserve Component

$$\begin{array}{ccccc} 733 & & & & \\ \text{Wartime}_R & & + & \text{CORC} & \\ & & & & = \text{THCSRR}_R \end{array}$$

Figure 3-1

Source:N931

manpower readiness requirements for fleet hospitals and provides the structure for the entire medical department to complete both the day-to-day and wartime operational support mission. The allocation of Navy medical manpower determined by the THCSRR across Navy platforms and facilities is represented by the Total Force Readiness Alignment Plan (RAP). Figure 3-2 illustrates the current alignment of fleet hospitals in the Total Force Readiness Alignment Plan.

Total Force Readiness Alignment Plan (RAP)

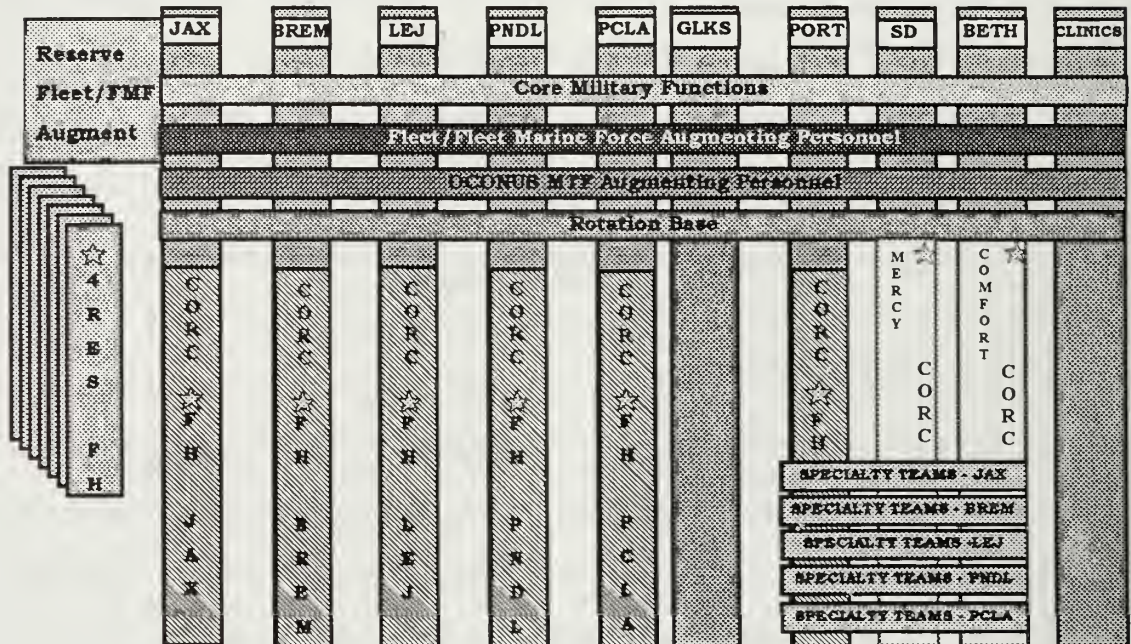


Figure 3-2

Source: N931

Instead of fleet hospital billets being scattered among various commands throughout the United States, the RAP centralized the billets for one fleet hospital at one CONUS hospital. The hospitals that are designated to support fleet hospitals are referred to as Sourcing Hospitals. The primary wartime responsibility for these Sourcing Hospitals designated to deploy as fleet hospital units is to meet the readiness requirement to support the fleet hospital platform. The Sourcing Hospitals that are designated to

deploy as fleet hospital units are: Naval Hospital Jacksonville, Naval Hospital Bremerton, Naval Hospital Camp Pendleton, Naval Hospital Camp Lejeune, Naval Hospital Pensacola, and Naval Medical Center Portsmouth.

The theory behind assigning a single Sourcing Hospital to deploy as a fleet hospital is simple. Personnel that work together supporting the day-to-day peacetime dividend mission will be able to adjust better and work together more effectively when deployed to support the wartime mission. The Executive Officer of the Sourcing Hospital is assigned duty as the Commanding Officer of the fleet hospital. The majority of the command's executive staff deploys with the fleet hospital, keeping the established internal chain of command closely aligned with the peacetime organizational structure.

The new configuration of fleet hospital augmentation assignments was partially tested when Fleet Hospital FIVE (FH5), the Single Source fleet hospital at Bremerton, was activated in January 1997. Fleet Hospital FIVE's task was to provide echelon II+ medical support for U.S. Support Group, Haiti, the United Nations Support Mission in Haiti and Humanitarian Assistance. Approximately 50 staff members from Naval Hospital Bremerton assigned to the command's fleet hospital platform deployed to Haiti. The Executive Officer, Captain Brian Brannman, deployed as Fleet Hospital

FIVE's Commanding Officer [Ref. 18]. He indicated that the operation and deployment of FH5 under the new staffing configuration worked very well. "Everyone was familiar with each other because of their working relationship at Naval Hospital Bermerton. Working together as FH5 was simply an extension of working at Naval Hospital Bremerton." [Ref. 19].

E. FLEET HOSPITAL TRAINING, POST COLD WAR

Following DS/DS the Assistant Secretary of Defense for Health Affairs chartered the Joint Medical Readiness Education Council (JMREC) to provide executive level oversight of joint medical readiness training. In the following year the JMREC formed a Training Advisory Group to define medical readiness training, identify training programs and assess the mission, function and requirements for the JMREC [Ref. 5].

In December 1995 the Department of Defense published DODI 1322.24, Military Medical Readiness Skills Training. This instruction "assigns responsibilities and prescribes procedures for the developing and sustaining comprehensive systems for providing, assessing, and monitoring military medical skills training essential for all military personnel, healthcare personnel, and medical units." [Ref. 13].

As a result of DODI 1322.24, fleet hospital training was divided into Fleet Hospital Phase I and Phase II .

training. Phase I training is conducted for 10 days for Active duty and 12 days for Reserve personnel. Phase I training is designed to provide general familiarization with the Fleet Hospital Program, conduct rating specific training, and assembly and disassembly of a fleet hospital. Additionally, simulated operational casualty exercises are conducted during Phase I training.

Phase II training is conducted for 6 days for Active duty and 12 days for Reserve personnel. Phase II training is designed to give an individual fleet hospital unit the opportunity to assess the efficiency of their training programs and evaluate the unit's operational readiness. During Phase II training, updates to the Fleet Hospital Program are provided, refresher training on assembly and disassembly of a fleet hospital is conducted, the command staff's responsibilities are expanded, and in-depth functional area training is conducted during an extended, 36 hour mass casualty exercise [Ref. 1].

Beginning in 1997, fleet hospital training underwent another structural change. Phases I and II were discontinued and replaced with Fleet Hospital Indoctrination and Orientation, and Fleet Hospital Field Training respectively. Fleet Hospital Indoctrination and Orientation is conducted over a 1 1/2 to 2 day timeframe. Indoctrination and Orientation training is no longer

conducted at FHOTC, but is exported to the command requiring training. The content of the orientation training is essentially the same as Phase I training; however, greater concentration is placed on orientation to the Fleet Hospital Program rather than hands-on experience with the equipment.

Fleet Hospital Field Training is where students receive hands-on practical training. Fleet Hospital Field Training is conducted over a 9 day period at FHOTC. The big change in the field training is that 280 to 290 personnel report for training from the same Sourcing Hospital designated to deploy as a fleet hospital unit [Ref. 14]. Figure 3-3 is a table of the evolution of fleet hospital training.

F. FLEET HOSPITAL OPERATIONAL READINESS EVALUATION

As the Medical Department focuses on the readiness mission, the Department has searched for a means to measure the degree of readiness to deploy of fleet hospital Sourcing Hospitals. A number of commands have worked closely to develop a fleet hospital Operational Readiness Evaluation (ORE). A Beta test of the ORE involving fleet hospitals Camp Pendleton and Bremerton is scheduled for February 1998. The first official ORE of a Sourcing Hospital is scheduled for April 1998. All fleet hospitals, both Active Duty and Reserve will participate in the ORE process [Ref.26].

The Evolution of Fleet Hospital Training

1995				1997			
Training	Time	Place	Purpose	Training	Time	Place	Purpose
Phase I	(AD) 10 Days (R) 12 Days	FHOTC	Intro to FH Program, rating training, assembly & disassembly of FH	Indoctrination & Orientation	1 1/2 to 2 Days	Local Command	Intro to FH Program
Phase II	(AD) 6 Days (R) 12 Days	FHOTC	Individual FH unit training, assess training efficiency, evaluate operational readiness	FH Field Training	9 Days	FHOTC	Advanced unit field training, assembly, disassembly

Figure 3-3

G. TRAINING OVERSIGHT

As in DOD as a whole, there are numerous organizations and activities that exercise some oversight responsibility for the medical readiness of fleet hospital personnel. Figure 3-4 indicates the key organizations with some degree of oversight responsibility for the medical readiness of Active Duty personnel assigned to fleet hospital platforms. The Under Secretary of Defense for Personnel and Readiness has overall responsibility for the readiness training of all military personnel. The Assistant Secretary of Defense for Health Affairs (ASD(HA)) is responsible for ensuring that all the policies and programs specified in DODI 1322.24, Military Medical Readiness Skills Training, are followed. The Chairman of the Joint Chiefs of Staff is responsible for formulating policies for joint training and advises the ASD(HA) on the priorities for joint medical training. The Secretary of the Navy is responsible for ensuring that policies and procedures are established within the Navy to comply with DODI 1322.24, to provide tracking and reporting mechanisms, and coordinate the Program Objective Memorandum process (POM) [Ref. 13].

The Chief of Naval Operations (N931) is responsible for the initial outfitting and prepositioned maintenance costs of fleet hospitals. Additionally, N931, Medical Resources, Plans and Policy Division, is responsible for the readiness

FLEET HOSPITAL READINESS OVERSIGHT RESPONSIBILITIES:

ACTIVE DUTY

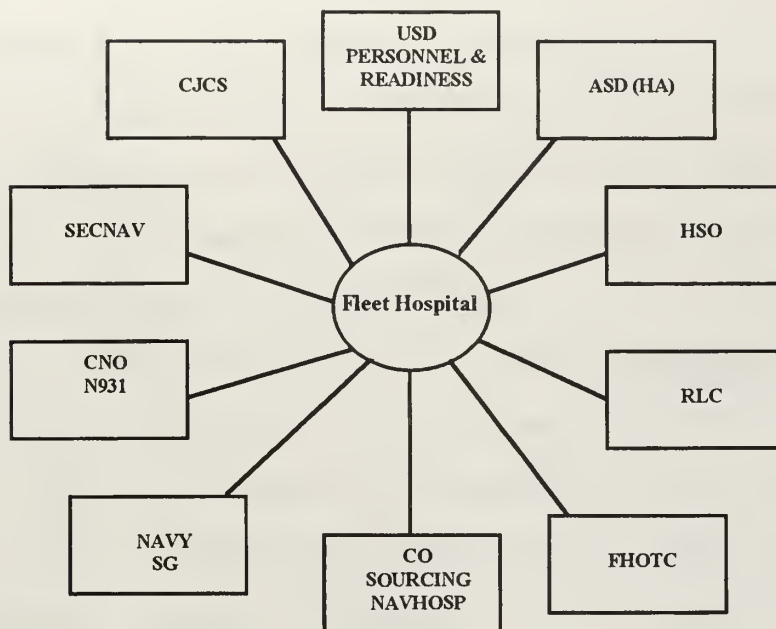


Figure 3-4

Source: DODI 1322.24 and NWP 4-02.4

of all fleet hospitals. BUMED is responsible for monitoring the training of all Active Duty personnel assigned to fleet hospital platforms. However, BUMED has also tasked the Healthcare Support Office (HSO) to monitor the training status of individuals assigned to fleet hospital platforms [Ref. 7]. Additionally, the HSO monitors fleet hospital platform gender ratios, and performs annual readiness reviews in coordination with the Responsible Line Commander.

The FHOTC is responsible for providing training for medical and non-medical personnel in fleet hospital assembly, operations, and disassembly. Commanding officers of the Sourcing hospitals are responsible for ensuring that all personnel under their command obtain the necessary training to fill the fleet hospital platform [Refs. 1, 7, 13].

Figure 3-5 is a diagram of organizations that have oversight responsible for the medical readiness of Reserve personnel. The organizations that exercise responsibility for monitoring the readiness of reserve personnel differ slightly from their Active duty counterpart. The Assistant Secretary of Defense for Reserve Affairs (ASD(RA)) is responsible for monitoring the readiness of reserve personnel. Additionally, ASD(RA) coordinates and makes recommendations to ASD(HA) on the content of medical readiness training courses for Reserve personnel.

The Commander, Naval Surface Reserve Force, is responsible for monitoring the readiness of personnel assigned to Reserve fleet hospitals. And like the Sourcing hospital's Commanding Officer, the Commanding Officer of a Reserve fleet hospital is responsible for ensuring that all personnel under their command obtain the necessary training to fill the fleet hospital billet [Refs. 1, 3].

FLEET HOSPITAL READINESS OVERSIGHT RESPONSIBILITIES:

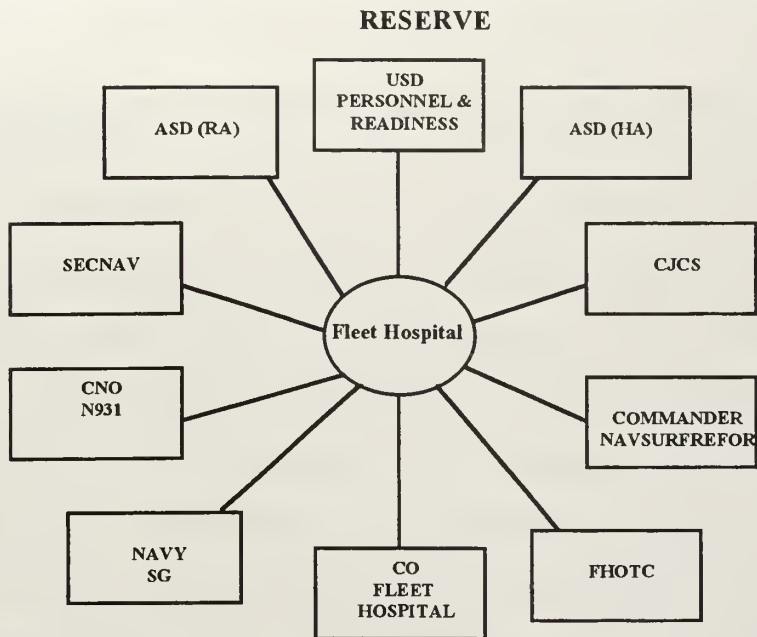


Figure 3-5

Source: DODI 1322.24 and NWP 4-02.4

The method for reporting the readiness status of personnel assigned to fleet hospital platform is through the Status of Resources and Training System (SORTS). The Department of Defense defines SORTS as: “a single automated reporting system within DOD that provides the National Command Authorities and Chairman of the Joint Chiefs of Staff the authoritative identification, location, assignment, personnel, and equipment data for all registered units and organizations of the U.S. Armed Forces.” [Ref. 15].

IV. IMPLEMENTATION PLANS, POLICIES AND PROGRESS

A. TOTAL FORCE READINESS ALIGNMENT PLAN (RAP): FLEET HOSPITALS

The process of assigning all six of the Active Duty Sourcing Hospitals to support fleet hospital platforms is completed [Ref. 23]. Approximately 85 percent of the current Navy Medicine manpower billets identified in the THCSRR model are validated. An analysis is being conducted to assist the Department of Defense in deciding whether to keep the additional 15 percent of personnel over the THCSRR requirement [Ref. 20]. The analysis will evaluate the costs and benefits of using the additional Active Duty personnel to off set the costs in the delivery of healthcare services to all beneficiaries versus out-sourcing the services.

As Navy Medicine focuses on supporting the Navy and Marine Corps vision articulated in OMFTS, readiness policies and practices are changing. The THCSRR is a model Navy Medicine uses to size medical end strength in accordance with readiness. If any of the factors used to develop the THCSRR model change, there is a ripple effect that leads to changes in fleet hospital requirements and structural makeup.

As previously discussed in Chapter III, a comprehensive study of the military healthcare system was completed in

November 1993. A follow-on study, referred to as the 733 Update, was initiated and largely completed in late 1997. Although the results of the 733 Update study have not been officially released as of this writing, the requirement for fleet hospitals is expected to increase from 10 to 12 [Ref. 20]. This would represent a \$67 million dollar investment to procure the 2 additional fleet hospitals. Naval Reserve forces are slated to staff the additional hospitals [Ref. 20].

B. FLEET HOSPITAL MANPOWER

Using information gathered from lessons learned during Operation Desert Shield/Desert Storm, the Medical Department's corps chiefs, Director, Medical Corps; Director, Medical Service Corps; Director, Nurse Corps, Director, Dental Corps; and representatives from N931 met to update the Authorized Manpower Document (AMD) for 500-bed fleet hospitals [Ref. 24]. Based on current warfare doctrine, it was concluded that a number of the specialty skills assigned to fleet hospital platforms were not appropriate. With input from each of the corps chiefs, N931 developed the new AMD for fleet hospitals in May 1997 [Ref. 24]. Figure 5-1 illustrates the current manpower configuration for fleet hospitals.

500-Bed Fleet Hospital Staffing

BILLET	NUMBER OF PERSONNEL
Medical Department Staff (2000)	2
Medical Corps (2100)	68
Nurse Corps (2900)	155
Dental Corps (2200)	4
Medical Services Corps (2300)	21
Non-Medical Dept. Officers	9
Hospital Corpsmen	474
Dental Technicians	10
Non-Medical Enlisted	235
TOTAL	978

Figure 5-1

Source: Fleet Hospital Operations and Training Command

When Navy hospital Executive Officers (XO) receive Permanent Change of Station (PCS) orders to one of the Sourcing Hospitals, they are now assigned additional duty as Commanding Officer of the Fleet Hospital Unit [Ref. 20]. Although the XO is currently the only member of Sourcing Hospitals assigned to support fleet hospitals through PCS orders, in the future all personnel are expected to receive PCS orders to the fleet hospital platform, with additional duty to support the Sourcing Hospital [Refs. 20, 26].

Naval Hospital Camp Lejeune has implemented a temporary

measure pending implementation of the PCS order initiative. All personnel at Naval Hospital Camp Lejeune assigned to augment operational platforms wear a nametag that indicates their augmentation assignment. For instance, the nametag would display the member's name and below the name, Fleet Hospital 6. Having the augmentation platform displayed on the nametags is intended to help the members identify with their operational mission. According to the CO of Naval Hospital Camp Lejeune, "they can not make the name tags fast enough. Everyone wants to be identified with their operational platform." [Ref. 26].

C. NAVAL EXPEDITIONARY MEDICAL SUPPORT SYSTEM (NEMSS)

To keep pace with the new focus of the Navy and Marine Corps' vision of OMFTS, the Medical Department developed the 100-bed fleet hospital to fulfill the requirement for lighter and more flexible platforms. As excess hospitals were removed from the inventory, the components for these new fleet hospitals were assembled. The 100-bed fleet hospital was established around 1992, but removed from the inventory in 1997 [Ref. 25].

Around the same timeframe, the development of a capability to extract portions of a 500-bed hospital was being discussed [Ref. 25]. The result is the Naval Expeditionary Medical Support System (NEMSS). NEMSS is designed to be a breakaway unit that provides CINCs the

capability to extract from 1 to 120 beds to support the need of an operation [Ref. 25]. The NEMSS package will be configured into the front end of a 500-bed fleet hospital. The fleet hospital that began the SLEP process during the fall of 1997 will be NEMSS-configured upon completion. Figure 5-2 is a picture of the NEMSS setup. Figure 5-3 is a comparison of the requirements for a 500-bed hospital versus those for NEMSS.

D. FLEET HOSPITAL TRAINING SETS

As the requirement for the number of fleet hospitals was reduced from 17 to 10, excess equipment for the hospitals being removed from the inventory accumulated. Instead of stockpiling or disposing of the equipment as excess material, a decision was made to use the equipment at the fleet hospital Sourcing Hospitals for training purposes. The training sets are made up of the same type of equipment that is part of the 500-bed hospitals. With the training set located at the Sourcing Hospitals, personnel are able to complete the required five days a year training on fleet hospital equipment more conveniently. The first training set was delivered to Naval Hospital Camp Lejeune in October 1997. It is expected that all six Sourcing Hospitals will be outfitted with training sets by the year 2000 [Ref. 20].

NAVAL EXPEDITIONARY MEDICAL SUPPORT SYSTEM
(NEMSS)

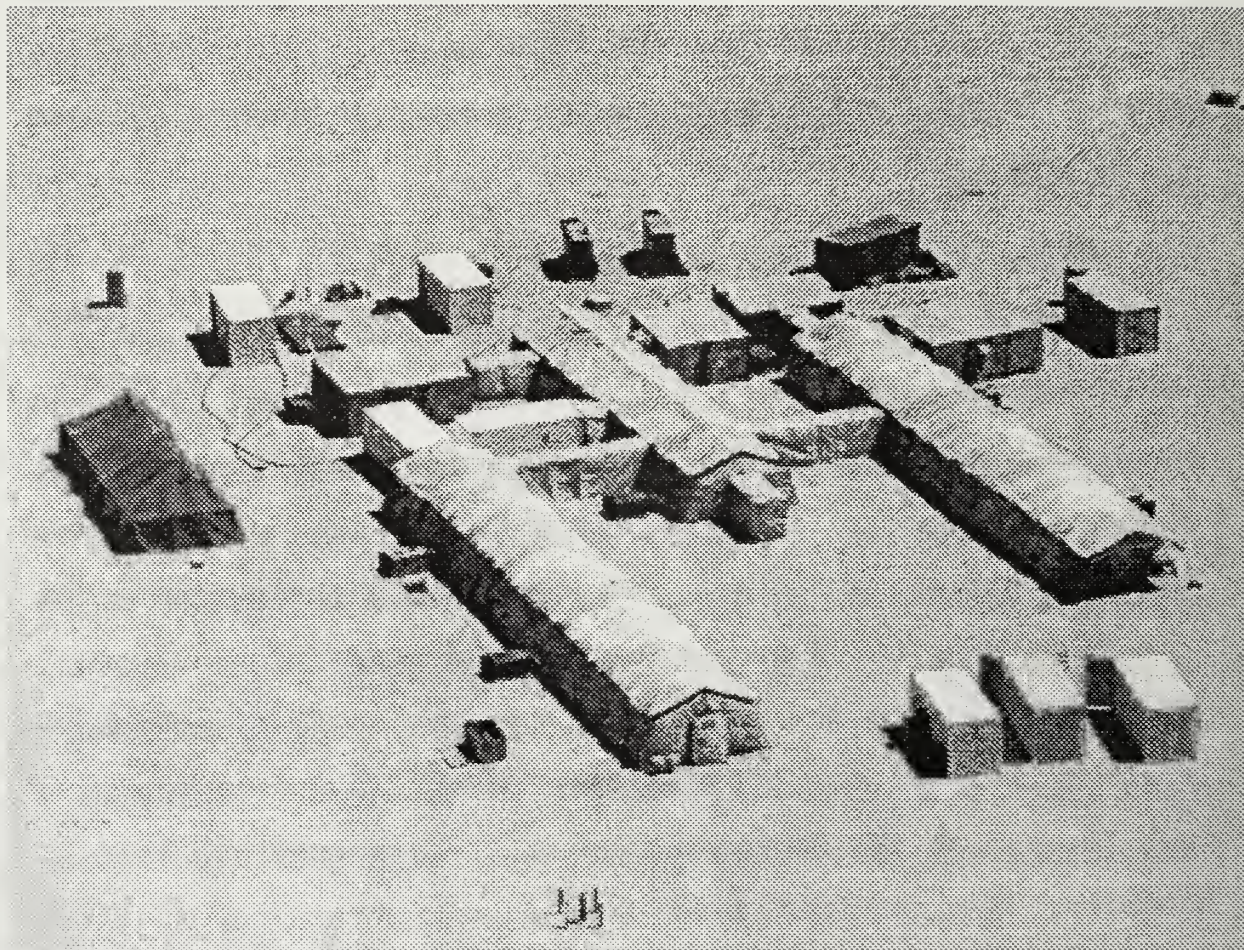


Figure 5-2

Source: FHSO

Comparison of a 500-bed Fleet Hospital with NEMSS

Item	500-bed hospital	NEMSS
Site Required	28 Acres	2 Acres
Care Capabilities		
Ave. Daily Admissions	80	30
Ave. Daily Operative Procedures	54	14
Ave. Daily Specialty Clinical Care	78	0
Staff		
Medical	737	206
Non Medical	241	68
Total	978	274
Structure		
ISO Hardwall Shelters	2	0
ISO Expandable Tactical Shelter, 2:1	7	2
ISO Expandable Tactical Shelter, 3:1	6	2
ISO Sanitation System Container	104	0
ISO Hazardous Material Container	7	0
ISO Container, Surgical Bin	0	1
ISO Refrigerated Container	5	0
ISO Shipping Container General Cargo	350	57
ISO Fuel Storage Tank (6-CONS)	7	1
Temper Tent Sections (8'L x 20'W)	356	37
General Purpose Tents (18'x 52')	92	6
Maintenance Tents (20'x 64')	5	0
Circus Tents (40'x 80')	2	0
Vehicles	89	4
Generators (100 KW)	24	2
Radio Communications		
ISO Communications Van, 1:1	1	0
Transportable HF Radio	0	1
INMARSAT	0	0
Transportable VHF/UHF Radio	0	2
STU III Phone	0	1
Total Hospital Cube (Measured Ton)	17,180	2,088

Figure 5-3

Source: PML-500

E. PML-500 TRANSFER TO MARINE CORPS

During 1997 the Medical Department has been considering

the transfer of the Fleet Hospital Program to the Marine Corps [Ref. 20]. Currently the Fleet Hospital Program falls under the Commander, Navy Supply Systems Command (NAVSUP). NAVSUP wants to divest its command of Fleet Hospital Program type responsibilities. The Medical Department feels that the management of the Fleet Hospital Program should go to the Marine Corps. The primary reason that fleet hospitals exist is to support Marine Corps operations. The best way to ensure that the Fleet Hospital Program remains in step with OMFTS may be to shift responsibility for this program to the Marine Corps. However, the Marine Corps has not agreed to the transfer and has rejected the opportunity to manage the program [Ref. 20].

F. DIRECTOR OF READINESS

The Director of Readiness is another new concept that is evolving in the Medical Department [Ref. 20]. The concept attempts to answer the question of who should be assigned duty as Commanding Officer of hospital ships and fleet hospitals. Currently, Executive Officers of Sourcing Hospitals and Deputy Commanders of Medical Centers are assigned duty as Commanding Officers of fleet hospitals and hospital ships, respectively. There has been some concern as to whether this assignment represents the best decision for command of these platforms. Executive Officers have tremendous responsibilities operating the Sourcing

Hospitals, which do not go away when they deploy. A Director of Readiness may address this problem.

A Navy Captain (O6) would be assigned to fulfill the duties of the Director of Readiness. Each of the six Sourcing Hospitals and the two Medical Centers assigned to augment hospital ships would have a billet for a Director of Readiness. The Director would come from the current pool of CO and XO screened officers. The responsibilities of the Director of Readiness would include ensuring that all personnel assigned to augmentation platforms receive appropriate training to deploy when required, in addition to deploying as the CO of the fleet hospital or hospital ship. The main focus of the Director of Readiness in a non-deployed status is readiness. This concept has not yet been approved for implementation [Ref. 20].

G. RESERVE INTEGRATION

The Surgeon General of the Navy has articulated a vision of total integration of Reserve components with Active Duty assets [Ref. 23]. Although the concept of total integration of the Reserves is not new, since DS/DS a number of programs were implemented to improve the Active/Reserve working relationship.

Reservists performing their two weeks Active Duty for training try to work at the command that they are billeted to augment during Reserve activation. For example, a

Reserve Captain filling a billet to augment Naval Hospital Bremerton as the XO, to support care of returning casualties, would work at Naval Hospital Bremerton during their Active Duty training period. Conducting training in this manner familiarizes the Reservist with the duties, responsibilities, and command they will support.

Currently, a number of different Reserve units have assignments to backfill Sourcing Hospitals. Each Reserve unit has its own Commanding Officer and the units may be located throughout large geographical areas. Consequently, the Commanding Officer of Sourcing Hospitals must coordinate with numerous people concerning Reserve affairs [Ref. 26]. Efforts are being made to streamline this process by assigning a single Reserve element for the Sourcing Hospital's CO to interact with.

H. HEALTH SERVICE SUPPORT: JOINT VISION 2010

The concepts being developed in Joint Health Service Support 2010 (JHSS 2010) center around moving from the current system of echelons of care, which consists of functional alignment, to a process capability. Figure 5-4 illustrates the shift in Health Service Support (HSS) necessary to deliver care in the future. Instead of focusing on echelons of care the focus is shifted to the capabilities of first responder care. First responder care includes enhancing self and buddy aid and the skills of

hospital corpsman [Ref. 20].

The concept of Far Forward Surgery is another area believed to be important for implementing JHSS 2010. The way patients are evacuated is expected to change from evacuating stable patients to stabilized patients. The theater hospital, whether it is a fleet hospital, hospital ship or casualty treatment and receiving ship, will deliver essential care and prepare for evacuation. Time is expected to be a major factor in the treatment of casualties in the future.

As Navy Medicine prepares to support future Fleet Marine Force operations, the process for delivering healthcare is expected to be the focal point instead of evacuating patients through echelons of care. Patients will receive enroute care to stabilize vital signs as they are transported to the theater hospital for essential care and prepared for evacuation to CONUS facilities [Ref. 20]. Figure 5-4 displays the shift that is necessary to meet future healthcare needs.

Health Service Support: Joint Vision 2010

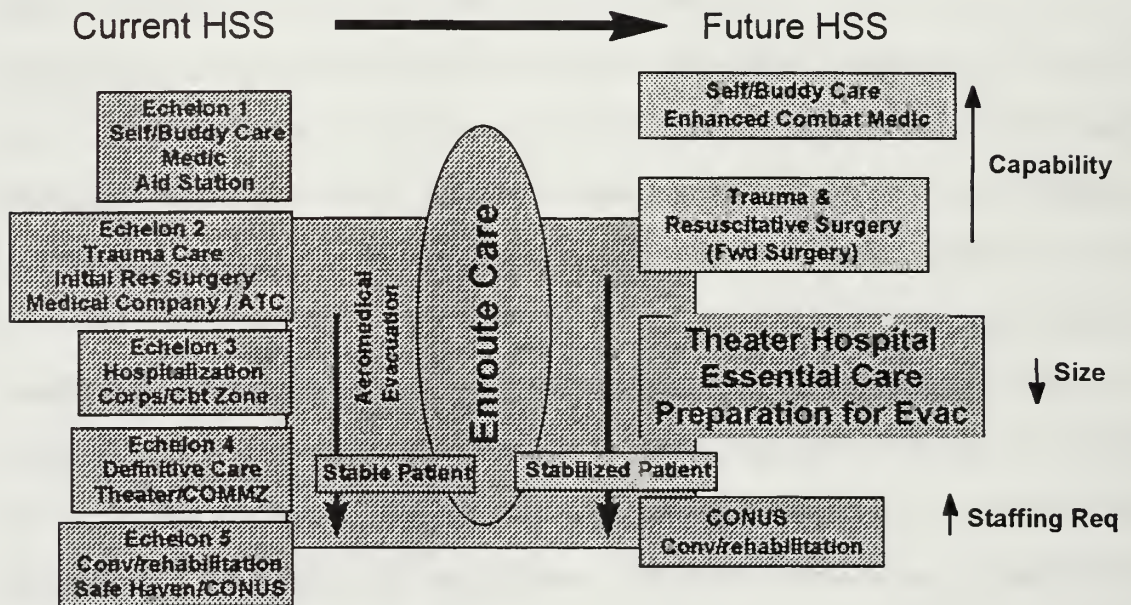


Figure 5-4

Source: N931

V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

A. SUMMARY

This thesis examined the process used to resource the current fleet hospital structure. A review of planning, doctrine, and manpower requirements as they affect budgeting for fleet hospitals was conducted to identify the scope and nature of changes to the structure of the Fleet Hospital Program. Specific objectives of this analysis were to:

- Describe the current process used to plan and budget for fleet hospitals.
- Determine the current fleet hospital structure, including both Active and Reserve forces.
- Determine the number of fleet hospitals required and how that requirement is generated.
- Identify which organizations are responsible for resourcing and managing the Fleet Hospital Program.
- Describe the doctrinal developments that guide the deployment of fleet hospitals.
- Describe the changes in the fleet hospital structure that occurred as a result of the Post Cold War environment.

Chapter I provided an introduction to the Fleet Hospital Program. The Fleet Hospital Program, established in 1979, had the primary mission of providing comprehensive medical support to the fleet and Fleet Marine Force engaged in combat operation. A requirement for 23 hospitals was

established in the early 1980s, though only 17 were actually procured. The requirement for fleet hospitals was subsequently reduced to 10 in the early 1990s. There are 10 500-bed fleet hospital pre-positioned throughout the world. Six of the hospitals are to be staffed by Active Duty personnel, with the remaining four hospitals staffed by Reserve personnel.

Chapter II provided background information on the budgeting process for fleet hospitals. Like all other Department of Defense programs, the Fleet Hospital Program receives all of its funding through the Planning, Programming and Budgeting System. The Medical Analysis Tool is the model used to estimate casualty rates and the number of fleet hospitals required based on the Defense Planning Guidance.

Chapter III described the unique training requirements for personnel assigned to fleet hospital platforms. An overview of the impact of the breakup of the Soviet Union and the post Cold War environment on the mission of fleet hospitals and the training of fleet hospital personnel is also provided. Numerous organizations, starting with the Under Secretary of Defense for Readiness, down to the Commanding Officers of Fleet Hospitals and Sourcing Hospitals exercise some oversight responsibility for the medical readiness of fleet hospital personnel.

In response to the 733 study, the Medical Department developed the THCSRR model to size medical endstrength in accordance with the readiness mission. Using the THCSRR model, assignment of fleet hospital augmentation billets shifted from being scattered among various commands throughout the U.S., to being centrally located at 1 of 6 Single Sourcing Hospitals.

Chapter IV discussed Navy Medicine's plans and policies to support the shift in Marine Corps doctrine to more rapid and flexible operational maneuvers Forward...From the Sea. All six of the Active Duty Sourcing Hospitals designated to support fleet hospitals are identified and undergoing new forms of training. Fleet hospital training sets were developed and deployed to assist personnel in acquiring the necessary skills to assemble, operate and disassemble a fleet hospital in a hostile environment. Fleet hospital staffing was adjusted to meet realistic operational needs. The Naval Expeditionary Medical Support System was developed to provide operational commands a breakaway unit with the capability to extract from 1 to 120 beds to support the needs of an operation.

To coordinate the process for meeting the future needs of operational forces, Joint Health Service Support 2010 (JHSS 2010) was developed. In JHSS 2010, the focus for delivering healthcare to operational forces shifts from

evacuating patients through echelons of care to increasing the capabilities of first responder care.

B. CONCLUSIONS

Several factors have had an impact on the structure for planning and budgeting for fleet hospitals. These include a changing global security environment, political pressures to reduce infrastructure, a shift toward the readiness mission, and changes in the Navy and Marine Corps focus from a global threat on the high seas to a focus on littoral areas.

The world has changed significantly since the original concept of sustained definitive healthcare support delivered in a field hospital setting was developed. The threat of global war against a superpower that results in thousands of casualties has significantly reduced since the breakup of the former Soviet Union. The Cold War mission was to be able to deliver medical support for two nearly simultaneous Major Regional Conflicts. Fleet Hospitals were established to provide medical care in support of the Cold War mission. While the Cold War mission has diminished, it has also shifted to include Military Operations Other Than War (MOOTW). Supporting MOOTW requires a different medical unit configuration than a 500-bed fleet hospital.

Anticipating a peacetime benefit from the reduced threat, Congress placed resource constraints on the Department of Defense (DOD). These resource constraints

pushed DOD to downsize the force structure and redefine the mission.

In order to meet the future security needs to support the National Defense Strategy, Navy and Marine Corps amphibious doctrine shifted to more flexible operational maneuver from the sea, noncombatant evacuations and humanitarian operations. As these landing forces become lighter, faster and more maneuverable, fleet hospitals must reconfigure to deliver adequate support to the mobile littoral strategy and humanitarian operations.

Navy Medicine has continued to strive to keep pace with the changing world environment as it transitions to an uncertain future. Readiness is the focal point that Navy Medicine uses to assess its ability to support Navy and Marine Corps operations. Use of the 500-bed fleet hospital is unlikely to occur in the Post Cold War era. The Naval Expeditionary Medical Support System (NEMSS) was developed to give operational commanders the ability to extract from 1 to 120 beds to support operations.

A very important aspect of readiness involves personnel receiving appropriate training for the platform they are expected to augment. The fleet hospital training program has evolved over its short existence as the environment changes. Excess equipment from reducing the inventory of fleet hospital is being configured into training sets for

use by Sourcing Hospitals. These training sets allow the Sourcing Hospitals to maximize the use of training equipment. If the training sets are used as intended, the next time personnel are required to assemble and operate fleet hospitals, a large percentage of the staff will have experience in the process.

Finally, the Medical Department's Readiness Realignment Plan (RAP), along with the Joint Health Service Support 2010 (JHSS) concept, serve as a guide to achieving the end strength and force structure necessary to support the wartime and day-to-day operational mission of the Medical Department into the 21st century.

C. RECOMMENDATIONS FOR FUTURE STUDY

The thesis examined the process for planning for and resourcing fleet hospitals. Future research on this topic might address two related issues.

One approach might identify and analyze a mechanism to establish Naval Medical Unit Type Codes to facilitate task organization within deployable platforms. This concept is referred to as Task Organized Unit Type Codes. The problem involves creating discrete sub-units tailored to limited deployments to simplify the Time Phased Force Deployment Data process for deploying medical personnel and equipment.

Another possibility is to investigate the feasibility of and develop a mechanism to integrate the Reserve for

deployment on medical platforms, to backfill for Military Operations Other Than War and Humanitarian Assistance and exercises, and the prospect of including medical personnel in the 200,000 Presidential call-up.

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